# 2. NOTES ON THE TAXONOMY AND DISTRIBUTION OF THE PACHMARHI HARE, LEPUS NIGRICOLLIS MAHADEVA WROUGHTON & RYLEY [MAMMALIA: LAGOMORPHA: LEPORIDAE]

The Pachmarhi Hare, Lepus nigricollis mahadeva Wroughton & Ryley is said to be an aberrant form with a restricted distribution, occurring only in Mahadeo Hills, Hoshangabad and Balaghat districts, Madhya Pradesh (Wroughton & Ryley 1913 a: 15; 1913 b: 57). Two other subspecies of the species, namely simcoxi Wroughton and ruficaudatus Geoffroy also occur in Madhya Pradesh; the former in 'Nimar, Berar and Central Provinces' (Ellerman & Morrison-Scott 1951: 438), in south Madhya Pradesh, and the latter in 'Gwalior, . . . Central India' (Ellerman & Morrison-Scott, loc. cit.: 438), in the north of the State.

A small collection of mammals made in Shahdol District, Madhya Pradesh, by Shri H. Khajuria of this Department, in May 1962, and recently received here, includes two specimens of mahadeva taken at Amarkantak, a place much outside the known range of this subspecies. Furthermore, an earlier collection of mammals from Balaghat District made by Dr. B. Biswas in August-September 1957, also includes four examples of mahadeva. Since, neither the description of the external characters of this form, nor its distribution fully correspond to the earlier works on the subject (Wroughton & Ryley 1913 a: 15), it has been thought worthwhile to record my findings in the following pages. Opportunity has also been taken to redefine the ranges of these three subspecies occurring in Madhya Pradesh, and to provide a working key for their identification on the basis of external characters.

Measurements: All measurements are in millimetres and of adult specimens. The external measurements were taken by the collector in the field. The cranial measurements are after Ellerman (1947) except for the greatest length which was taken from the anterior tip of premaxilla to the hindermost point of occiput.

## Lepus nigricollis mahadeva Wroughton & Ryley

Lepus mahadeva Wroughton & Ryley, 1913. J. Bombay nat. Hist. Soc. 22:15.

#### **MATERIAL**

2 & (1 juv.), 12; Muki (c. 549-686 m. alt.), Banjar Valley, Balaghat District, Madhya Pradesh, 2, 17 and 21 September, 1957. 1 &; Supkhar (c. 555 m. alt.,)

Banjar Valley, Balaghat District, Madhya Pradesh, 26 September, 1957; Collector: B. Biswas. 2 unsexed; Amarkantak (c. 1065 m. alt.), Shahdol District, Madhya Pradesh, 15 and 19 May, 1962; Collector: H. Khajuria.

MEACHIDEMENTS

WILLIAM CICLINI.	L1413	
	2 -	4 4

External:	233	19	
Head and body	 467,477	650	
Tail	 70, 87	95	
Hind foot	 105,106	105	
Ear	 94,95	99	
Skull:	233	19	2 unsexed.
Greatest length	 96, 97	94.7	86.5, 95
Condylobasal length	 85, 85.1	83.1	77, 83.3
Occipitonasal length	 		87.5, 93.9
Zygomatic width	 83, 85.1	40.2	40.7,
Nasal length	 42, 42.5	41	36.7, 39.3
Palatal foramen	 23.7, 24.7	24.5	20.8, 23.8
Upper tooth row	 15.9, 17	16.5	15.2, 16.6
Diastema	 24.5, 25.6	26.5	24, 25.3

Coloration: General coloration of the body agrees well with the description of Wroughton & Ryley (1913). However, except the female example from Muki, the nape in the other specimens have, in addition to grey, a little buffy suffusion, particularly on the middle of the nape along the vertebral column, due to intermixture of some buff-tipped hairs. This is more pronounced in the specimens from Amarkantak. Also, these specimens differ a little from those of Muki and Supkhar in having lesser amount of black on the basal parts of the tail hairs dorsally. The female example from Muki possesses an unusual patch of white hairs on the back close to the tail.

Distribution: Lepus n. mahadeva is a poorly known form, and the only previous record is based on six specimens of the type-series from Mahadeo Hills (five examples from Khapa, Dhiam and Pachmarhi, in Hoshangabad District, and one from Ouda in Balaghat District). The specimens from Amarkantak under report, however, extends its distribution farther eastwards.

Systematic position: The coloration of the nape has been generally given importance for the subspecific classification of Lepus nigricollis. Wroughton & Ryley (1913, p. 15) report that the nape in the typeseries of L. n. mahadeva is grey, that is, similar to that of L. n. simcoxi. In the specimens under report, however, the grey nape is suffused with buff. The amount of buffy suffusion appears to be due to locality and increases gradually from west to east, the easternmost population tending towards ruficaudatus. It would appear that mahadeva is somewhat intermediate between simcoxi and

ruficaudatus, rather than '. . representative of simcoxi in the altered condition of hilly country, . . .' (Wroughton & Ryley, 1913, p. 16).

General Remarks: By possessing large tracts of bush and jungle interspersed with cultivated patches, Madhya Pradesh forms a very suitable area for hares. Due to varying physiographic and climatic conditions within this State, at least three subspecies of hares are known to occur there. These three subspecies can be separated with the help of the following key:

1. Nape rufous or ochraceous; general body colour dull or darker, but the face, head and body not strongly washed with black; tail rufous brown ...

ruficaudatus

Nape smoke grey, grey or grey with buffy suffusion ...

2

2. Nape smoke grey; general body colour lighter than mahadeva and ruficaudatus; tail above blue black; grey patch on the rump ...

Nape grey or grey with buffy suffusion; general body colour richer and brighter than ruficaudatus; face, head and body strongly washed with black; tail above dingy rufous—the individual hairs black with buffy tips; absence of grey patch on the rump ...

simcoxi

mahadeva

As mentioned earlier the ranges of the three subspecies of Lepus nigricollis found in Madhya Pradesh have not been clearly defined so far. On the basis of the specimens present in the Zoological Survey of India and such information as are available in literature, it would appear that: (1) L. n. ruficaudatus occupies the northern slopes of the Mahadeo and Maikal ranges and the northern plains of Madhya Pradesh; (2) L. n. mahadeva occurs on the higher parts (c. 549-1065 m.) of Mahadeo and Maikal ranges of Madhya Pradesh in Hoshangabad, Balaghat and Shahdol Districts; and (3) L. n. simcoxi is distributed on the southern slopes of Mahadeo and Maikal ranges and the adjacent plains of Madhya Pradesh and Maharashtra from Khandesh as far east as Bhandara District. It also occurs in the south-western slopes and adjacent plains of Mahadeo Hills.

Two of the Mammal Survey specimens (now in the Zoological Survey of India) from Sleemanabad, Jabalpur District, and Mundra,

Saugor District, that were originally identified as simcoxi, appear on closer examination to agree with ruficaudatus. Wroughton & Ryley (1913, p. 57) also suggested that specimens from Mundra (Saugor District), Damoh and Narsingarh (Damoh District) perhaps go better with ruficaudatus.

#### ACKNOWLEDGEMENTS

My sincere thanks are due to the Director, Zoological Survey of India, for giving me facilities for the work. I am indebted to: Dr. B. Biswas for his constructive criticisms, many valuable suggestions and patient correction of the manuscript; to Dr. K. K. Tiwari, for his interest in the work.

ZOOLOGICAL SURVEY OF INDIA. CALCUTTA, September 6, 1966.

R. K. GHOSE

#### REFERENCES

BLANFORD, W. T. (1888-1891): The fauna of British India including Ceylon and Burma. Taylor & Francis, London. ELLERMAN, J. R. (1947): A key to the

Rodentia inhabiting India, Ceylon and Burma based on collections in the British

and Indian Mammals. British Museum (Nat. Hist.), London.

PRATER, S. H. (1965): The book of Indian Animals. Bombay.
WROUGHTON, R. C. (1912): Some

new Indian Rodents. J. Bombay nat. Hist. Soc. 21: 238-342.

(1913a): Scientific results from the Mammal Survey. op. cit. 22:13-21.

& (1913b): The Bombay Natural History Society's Mammal Survey of India. Report No. 7. op.cit. 22:45-58.

- (1921): Summary of the result from the Indian Mammal Survey of the Bombay Natural History Society—part VI. op. cit. 27: 66-69.

### 3. A NOTE ON CAPRA HIRCUS BLYTHI HUME, 1875

Whilst writing this note as a sequel to an earlier one on Ovis orientalis, I feel it desirable to explain my purpose. My knowledge of this species is still meagre and I hope to increase it by further field trips. But by summarising information gleaned up-to-date, I hope to stimulate similar observations from other amateur naturalists like myself, as well as to reveal observations about this wild goat which are either at variance with, or hitherto not recorded in the published accounts, which I have been able to see.

Most modern Zoological works recognise five species of true goats or caprinae (Walker 1964). West Pakistan is fortunate in being